Air Quality
ENVIRONMENTAL QUALITY

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL A. ABRACZINSKAS
Director

DRAFT

Mr. Geoffrey Roberson
Technical Services Director
Pine Hall Brick Co., Inc.
Post Office Box 836
Madison, North Carolina 27025

SUBJECT: Air Quality Permit No. 03997T28
Facility ID: 7900038
Pine Hall Brick Co., Inc.
Madison, North Carolina
Rockingham County
Fee Class: Title V
PSD Class: Minor

Dear Mr. Roberson:

In accordance with your completed Air Quality Permit Application for significant modification of a Title V permit, received May 30, 2017, we are forwarding herewith Air Quality Permit No. 03997T28 to Pine Hall Brick Co., Inc., Madison Facility, 634 Lindsey Bridge Road, Madison, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT". Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety

upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215-108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Rockingham County has triggered increment tracking under PSD for PM-10, SO_2 and NOx. However, this permit modification does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from DRAFT, 2018 until September 30, 2022, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. Should you have any questions concerning this matter, please contact Jenny Sheppard at 919-707-8727 or jenny.sheppard@ncdenr.gov.

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section
Division of Air Quality, NCDEQ

Enclosure

c: Heather Ceron, EPA Region 4 (with review)
Supervisor, Winston-Salem Regional Office
Connie Horne (cover letter only)
Central Files

ATTACHMENT to Permit No. 03997T28

Grinding Facilities and Plants 4

Insignificant Activities under 15A NCAC 02Q .0503(8)

Emission Source ID Nos.		Emission Source Description
33 Making Line	I-FD-008	One Plant 3 feeder (150 tph)
	I-CV-032	Conveyor to Plant 3 (150 tph)
	I-33 Dirt Bin	Dirt bin (60 tph
	I-CV-056	33 dirt belt (60 tph)
	I-PG-001	Pug mill (60 tph)
	I-FD-012	33 88-C feeder (15 tph)
	I-CH-001	33 Waste Brick Chipper (8 tph)
731-125 33 Extruder	I-EX-001	22 Extruder (60 tph)
731-165 33 Delivery Conveyors	I-CV-049	33 Cutter Timing belt (3 tph)
	I-CV-050	33 Tumble Ramp belt (60 tph)
	I-CV-051	33 Delivery belt (60 tph)
	I-CV-052	33 Short Scrap belt from Chopper (10 tph)
	I-CV-053	Scrap belt over tracks (10 tph)
	I-CV-054	33 Scrap belt to 88C feeder (10 tph)
	I-CV-055	33 Short belt from 88C feeder (13 tph)
	I-CV-057	33 Dirt belt (60 tph)
	I-CV-058	33 Die Scrap Belt (3 tph)
	I-CV-068	33 & 34 Cutter Scrap Belt (3 tph)
	I-CV-122	Waste conveyor (3 tph)
731-150 33 Coatings	I-MX-001	33 Sand Mixer
	I-CV-059	33 Sand mixer belt
	I-MX-002	33 Slurry Barrel Mixer
	I-MX-003	Slurry Mixer over line
	I-SB-001	33 Sandbox
	I-SL-001	33 Slurry Barrel
	I-SL-002	Slurry Barrel Over Line
	I-TU-001	33 Tumble Ramp
	I-TU-002	33 Tumble Rollers
	I-VB-001	33 Sand Vibrator Bin 1
	I-VB-002	33 Sand Vibrator Bin 2
	I-VB-003	33 Sand Vibrator Bin 3
34 Making Line	I-FD-008A	Plant 3 feeder (150 tph)
	I-CV-161	34 Dirt belt on top of building (150 tph)
	I-BN-002	34 Dirt Bin (60 tph)
	I-PG-002	34 Pug Mill (60 tph)
	I-FD-013	34 88-C feeder (18 tph)
	I-CH-002	34 Waste Brick chopper (8 tph)

Emission Source ID Nos.		Emission Source Description
732-125 34 Extruder	I-EX-002	34 Extruder (60 tph)
732-165 34 Delivery Conveyors	I-CV-060	34 Cutter Timing belt
	I-CV-061	34 Delivery Belt
	I-CV-062	34 Scrap Belt from Chopper
	I-CV-063	34 Scrap Belt from 88C feeder
	I-CV-064	34 Dirt Belt to Pug Mill
	I-CV-066	34 Dirt Belt
	I-CV-066A	34 Die Scrap Belt
732-150 34 Coating/ Texturing	I-FL-002	34 Flapper
	I-MX-004	34 Sand Mixer
	I-CV-067	34 Sand Mixer Belt
	I-SB-002	34 Sandbox
	I-TU-003	34 Tumble Ramp Incline
	I-TU-005	34 Tumble Rollers
	I-VB-004	34 Sand Vibrator Bin 1
	I-VB-005	34 Sand Vibrator Bin 2
	I-VB-006	34 Sand Vibrator Bin 3
732-199 34 Line Misc.	I-PP-015	34 Vacuum Pump
	I-HI-VAC3	Hi-Vac (housekeeping at Plant 3 kiln cars)
DC-001 Dust Collection System Making 3	I-BF3	Bagfilter vents inside
	I-TK-004	Coray 22 brick oil tank
	I-TK-005	P#-Additive -A Tank (calcium Lignofulfate 20,000 gallons)

Emission Source ID Nos.		Emission Source Description
Material Storage in Plant 3 Making	I-AU-031	Sand Bin Auger Bin #1
	I-AU-032	Pine Hall Sand Bin Auger
	I-AU-033	Sawdust Bin Auger
	I-AU-034	Fire Clay bulk bin Auger
	I-BN-033	Misc. Sand bin #1
	I-BN-034	Pine Hall sand bin #2
	I-BN-035	Sawdust bin- feeds plant 4 mixer
	I-BN-036	Fire Clay bulk bin
	I-BN-037	Plant 3 Pine Hall sand bin
	I-BN-038	Waste bin -Middle
	I-BN-039	Aberdeen Sand holding bin
	I-BN-040	Old Dutch Sand bin
	I-BN-041	Sawdust holding bin
	I-BN-042	Pine Hall sand holding bin
	I-BN-043	Aberdeen sand holding bin
	I-BN-044	Old Dutch Sand holding bin
	I-BN-045	Aplite holding bin
	I-CV-124	Conveyor 3#-Auger
	I-MX-005	Plant 4 mixer
	I-MX-006	Old Muller mixer
Grinding Facilities	I-3ES-CRUSH	One raw material crushing and handling operation including:
	I-3CR972-5	One twenty four inches by forty eight inches standby crusher (250 tons per hour capacity)
	I-3HM972-6	One double roll hammermill
	I-3GR972-7	Two Steele Incla grinders and one Stedman grinder
	I-3SS972-8	Two Simplicity scalping screens
	I-3SS972-9	Eight Simplicity screens (4 feet by 10 feet each)
	I-3DS972-10	Six Deister screens (4 feet by 8 feet each)
	I-3C-33	One conveyor belt from the standby crusher into the grinding building (30 inches in width)
	I-3PBCS	One portable brick crushing and screening unit (100 tons per hour capacity)
78-120 Sand Drying	I-AU-029	Auger #1 Top of Conveyor #1
	I-BN-032	Big bin
	I-BU-007	Gas burner on tub (250,000 Btu/hr)
	I-CV-120	Big bin conveyor-under bin
	I-CV-121	Conveyor #1 -leaving bin
	I-CV-122A	Waste conveyor
	I-CV-123	Conveyor #2 under tub
	I-DR-005	Dryer tub
	I-SC-034	Screen #1

Emission Source ID Nos.		Emission Source Description
Plant 4 Making	I-FD-007	Plant 4 feeder (150 tph)
	I-CV-033	Short belt to Plant 4
	I-CV-034	Long belt to Plant 4
831-110 41 Bins	I-BN-005	Bin #1
	I-BN-006	Bin #2
	I-CV-074	Bin #1 conveyor
	I-CV-075	Bin #2 conveyor
	I-CV-076	Conveyor #1
	I-CV-077	Conveyor #2
831-120 41 Pugs	I-CV-078	Conveyor #3
	I-CV-079	Conveyor #4
	I-PB-003	Pug mill #1
	I-PUG-004	Pug mill #2
	I-FD-041	41-88 even feeder
831-130 41 Extruder	I-EX-009	41 Extruder
	I-PP-021	Vacuum pump
831-140 41 Making line Misc.	I-AU-011	Waste auger under 41 line
	I-CH-003	41 Waste Brick Chopper
	I-CT-007	41 Slug Cutter
	I-CV-080	Conveyor #5
	I-CV-081	Conveyor #6
	I-CV-082	Conveyor #7
	I-CV-083	Conveyor #8
831-150 41 Setter	I-AU-012	Slug ejector auger 41 setter
	I-CT-008	Wire Bank 41 Setter
	I-CV-084	41-23 waste conveyor
	I-CV-085	41-25 conveyor
	I-CV-086	41-26 conveyor
	I-CV-087	41-27 conveyor

Emission Source ID Nos.		Emission Source Description
Sand Coatings SB-003-CY003	I-SB-003	41 Sandbox
	I-AU-013	41-18 Big Hopper Auger #1
	I-AU-014	41-19 Big Hopper Auger #2
	I-AU-015	41-20 Big Hopper Auger #3
	I-BN-007	Big Hopper Bin#1
	I-BN-008	Big Hopper Bin#2
	I-BN-009	Big Hopper Bin#3
	I-BN-010	Small Hopper Bin #1
	I-BN-011	Small Hopper Bin #2
	I-BN-012	Small Hopper Bin #3
	I-BN-013	Small Hopper Bin #4
	I-CV-088	41-14 Small Hopper Conveyor #1
	I-CV-089	41-15 Small Hopper Conveyor #2
	I-CV-090	41-16 Small Hopper Conveyor #3
	I-CV-091	41-17 Small Hopper Conveyor #4
	I-CV-092	41-104Bin out Conveyor
	I-CV-093	41-11 Conveyor to sandbox
	I-CV-094	Return Waste Conveyor to Sandbox
	I-CV-095	41-13Waste cleanout Conveyor
	I-SC-032	Vibrator Screen
831-180 41 4-Hopper Rig	I-AU-016	4- Hopper Auger #1
	I-AU-017	4- Hopper Auger #2
	I-AU-018	4- Hopper Auger #3
	I-AU-019	4- Hopper Auger #4
	I-BN-014	4- Hopper big Bin#1
	I-BN-015	4- Hopper big Bin#2
	I-BN-016	4- Hopper Big Bin#3
	I-BN-017	4- Hopper Big Bin#4
	I-BN-018	4- Hopper Small Bin
	I-CV-096	41-4 Hopper clean out Conveyor
	I-VB-010	41-4 Hopper small bin vibrators
	I-TK-006	Brick Machine oil tank
832-110 42 Making Line	I-BN-019	Bin#1
	I-CV-097	Bin #1 Conveyor
	I-FD-040	Special Colorant Feeder FD-040
	I-CV-099	Conveyor #3

Emission Source ID Nos.		Emission Source Description
832-120 42 Pugs	I-CV-100	Conveyor#4
	I-FD-043	42-88 Even Feeder
	I-PG-005	Pug #3
	I-PG-006	Pug #4
832-130 42 Extruder	I-EX-013	42 Extruder
	I-PP-029	Vacuum Pump
832-140 42 Line	I-AU-020	Waste Augers under 42 line
	I-CH-004	42 Waste Brick Chopper
	I-CT-009	42 Slug Cutter
	I-CV-101	Conveyor #5
	I-CV-102	Conveyor #6
	I-CV-103	Conveyor #7
	I-CV-104	Conveyor #8
832-150 42 Setter	I-CV-105	Double Conveyor
	I-CV-106	42-14 Waste Conveyor
	I-CV-107	42-13 Waste Conveyor
Sand Coatings 832-160	I-BN-020	Big Hopper Bin#1
	I-BN-021	Big Hopper Bin#2
	I-BN-022	Big Hopper Bin#3
	I-BN-023	Small hopper Bin #1
	I-BN-024	Small hopper Bin #2
	I-BN-025	Small Hopper Bin #3
	I-BN-026	Small Hopper Bin #4
	I-CV-108	42-21 Small Hopper Conveyor #1
	I-CV-109	42-20 Small Hopper Conveyor #2
	I-CV-110	42-19 Small Hopper Conveyor #3
	I-CV-111	42-22 Small Hopper Conveyor #4
	I-CV-112	42-23Bin out Conveyor to sandbox
	I-CV-113	42-24bin out Conveyor to sandbox
	I-CV-114	42-25 Bin out conveyor to sandbox
	I-CV-115	42-26 bin out Conveyor to sandbox
	I-CV-116	42-17 return waste conveyor
	I-CV-117	42-22 waste cleanout conveyor
	I-EC-038	42 Varitex control
	I-SC-033	Vibrator Screen

Emission Source ID Nos.		Emission Source Description
832-180 42 4 Hopper Rig	I-AU-024	4-Hopper auger#1
	I-AU-025	4-Hopper auger#2
	I-AU-026	4-Hopper auger#3
	I-AU-027	4-Hopper auger#4
	I-AU-028	Portable waste auger
	I-BN-027	4 Hopper big bin#1
	I-BN-028	4 Hopper big bin#2
	I-BN-029	4 Hopper big bin#3
	I-BN-030	4 Hopper big bin#4
	I-BN-031	4 Hopper small bins
	I-CV-119	42-41 Hopper clean out conveyor
	I-VB-008	Single hopper vibrator#1
	I-VB-009	Single hopper vibrator#2
871-110 Monorail 1	I-CV-125	Waste Conveyor Monorail 1
	I-CV-131	Belt Conveyor # 1 Monorail 1
	I-CV-132	Belt Conveyor # 2 Monorail 1
	I-CV-133	Belt Conveyor # 3 Monorail 1
	I-CV-134	Belt Conveyor # 4 Monorail 1
	I-CV-135	Belt Conveyor # 5Monorail 1
	I-CV-136	Belt Conveyor # 6 Monorail 1
	I-CV-137	Belt Conveyor # 7 Monorail 1
	I-CV-138	Belt Conveyor # 8 Monorail 1
872-110 Dehacker	I-CV-126	Waste Conveyor Dehacker
	I-CV-139	Belt Conveyor # 1 Dehacker
	I-CV-140	Belt Conveyor # 2 Dehacker
	I-CV-141	Belt Conveyor # 3 Dehacker
	I-CV-142	Belt Conveyor # 4 Dehacker
	I-CV-143	Belt Conveyor # 5 Dehacker
	I-CV-144	Belt Conveyor # 6 Dehacker
	I-CV-145	Belt Conveyor # 7 Dehacker
	I-CM-008	Refrigerant dryer
	I-DC-003	Dust Collection System
	I-TK-00	P4-Additive Tank [Calcium Lignosulfate] - 30,000 gallons
896-110 Pugs and Feeders	I-BN-046	Dirt Bin auger#1
	I-CV-148	Belt under bin (15 tph)
	I-CV-149	Belt feeding 25A pug (15 tph)
	I-PG-007	25A Pug mill
	I-CV-150	Belt From 88 Feeder (2 tph)
	I-FD-045	Even Feeder

Emission Source ID Nos.		Emission Source Description
896-120 Extruder	I-EX-018	25A Extruder (15 tph)
	I-PP-042	Vacuum Pump
	I-PP-043	Oil Pump
	I-CV-151	Short scrap belt (2tph)
	I-CV-152	Scrap belt under pt cutter
	I-CV-153	Scrap belt behind hacking line (2tph)
	I-CV-154	Scrap belt to 88 feeder (2tph)
	I-CV-155	#1-off bearing belt (15 tph)
	I-CV-156	#2-off bearing belt (15 tph)
	I-CV-157	Tumble belt (15 tph)
	I-CV-158	Delivery belt (15 tph)
	I-PU-042	Push-thru pusher (cutter) (15 tph)
	I-SB-006	Shapes sandbox (0.25tph)
962-120 Sawdust Scales/Dump/Screens	I-DP-001	Sawdust dump
	I-SC-023	Link-Belt Screen #1
	I-SC-024	Link-Belt Screen #2
	I-SC-025	Link-Belt Screen #3
	I-SC-026	Link-Belt Screen #4
	I-SC-027	Link-Belt Screen #5
	I-SC-028	Link-Belt Screen #6
	I-SC-029	Link-Belt Screen #7
	I-SC-030	Scalping screen
962-130 Sawdust Conveyors	I-CV-035	#3 Belt (sawdust)
	I-CV-036	#5 Stacker belt
	I-CV-037	#6 Waste Belt
	I-CV-038	#10 Belt
	I-CV-039	#11 Belt
	I-CV-040	#12 Belt
	I-CV-041	#13 Belt
	I-CV-042	#14 Belt
	I-CV-043	#15 Belt
	I-CV-044	#16 Screw Conveyor- Top of silo
	I-CV-045	#A Short Belt Plant 4
	I-CV-046	#B Belt Plant 4
962-150 Sawdust Feeders	I-FD-009	#1 Feeder -on road
	I-FD-010	#2 Feeder -on dump
	I-FD-011	#9 Feeder -New hopper

Emission Source ID Nos.		Emission Source Description
972-165 Conveyors	I-CV-002	1C-4(125 tph)
	I-CV-003	1C-2(125 tph)
	I-CV-004	1C-3(125 tph)
	I-CV-005	2C-4(125 tph)
	I-CV-006	2C-2(125 tph)
	I-CV-007	2C-3 (125 tph)
	I-CV-009	2C-1(84 tph)
	I-CV-010	#11 Belt (25 tph)
	I-CV-011	#12 Belt (81 tph)
	I-CV-012	#13 Belt (25 tph)
	I-CV-013	CC-1(250 tph)
	I-CV-014	Plant 5 truck belt (200 tph)
	I-CV-015	CC-1-B (250 tph)
	I-CV-017	CC-3 (100 tph)
	I-CV-018	#6 Belt and Hopper (50 tph)
	I-CV-019	#7 Belt (25 tph)
	I-CV-159	#9 Belt (75 tph)
	I-CV-020	#10 Belt (100 tph)
	I-CV-022	#1 Waste Belt (3 tph)
	I-Ptank 1 & 2	Two 30,000 gallon propane tanks
	I-HI-VAC4	Hi-Vac housekeeping at plant 4 kilns
	I-ES-1.1	Raw material Storage
	I-ES-1.4	Ground Storage
-	I-3-WHS	Plant 3 wood dust bin, screener, and two conveyors
-	I-4-WHS	Plant 4 wood dust bin, screener, and two conveyors
-	I-GEN (MACT, ZZZZ; NSPS, JJJJ)	Propane-fired emergency generator (100 kilowatts maximum capacity)
	I-GEN1 and I-GEN2 (MACT, ZZZZ)	Two natural gas-fired emergency generators (157 horsepower maximum capacity, each)
	I-GEN3 (MACT, ZZZZ)	Natural gas-fired emergency generator (7 kilowatts maximum capacity)

Plant 5

Emission Source ID Nos.		Emission Source Description
Water Controlled sources and clay extrusion under vacuum	I-MX-501	Double shaft mixer (55 tph)
	I-CV-509	Conveyor C-7 (55 tph)
	I-CV-510	Conveyor C-8 (55 tph)
	I-CV-511	Conveyor C-9 (55 tph)
	I-CV-512	Conveyor C-17 (5 tph)
	I-CV-513	Conveyor C-19 (5 tph)
	I-CV-514	Conveyor C-20 (5 tph)
	I-FD-511	Even feeder (55 tph)
	I-PG-501	Pug Mill (55 tph)
	I-EX-501	Extruder (55 tph)
	I-MX-502	Slinger #1 (0.075 tph)
	I-MX-502.a	Slinger #2 (0.075 tph)
	I-MX-502.b	Slinger #3 (0.075 tph)
	I-SL-501	Slurry System (0.075 tph)
	I-VB-501	Vibrating Feeder-Mangro (0.025 tph)
	I-CV-515	Conveyor C-10 (55 tph)
	I-CV-516	Conveyor C-11A (55 tph)
	I-CV-517	Conveyor C-11B (55 tph)
	I-CV-518	Conveyor C-11C (5 tph)
	I-CV-519	Conveyor C-12 (5 tph)
	I-CV-520	Conveyor C-13 (5 tph)
	I-CV-521	Conveyor C-14 (55 tph)
	I-CV-522	Conveyor C-15(3 tph)
	I-CV-523	Conveyor C-16(3 tph)
	I-CV-524	Marshalling conveyor (55 tph)
	I-CV-525	Separation conveyor (55 tph)
	I-CV-526	2 ¼ English Edge Press (55tph)
	I-CV-527	3inch English Edge Press (55 tph)

Water Controlled sources and clay extrusion under vacuum, cont.	I-MI-503	Setting Machine (55 tph)
	I-CV-535	Setter Robot Scrap Conveyor (3 tph)
	I-RB-501	Setter Robot #1 (27.5 tph)
	I-RB-502	Setter Robot #2 (27.5 tph)
	I-MI-508	Packaging Machine (55 tph)
	I-CH-501	Waste Chopper (8 tph)
	I-PP-503	Vacuum pump
	I-PTANK	Propane tank 30,000 gallon
	I-HI-VAC5	HI-Vac (housekeeping at kiln cars
	I-ES5.5	Raw material storage
	I-Dirt Storage	Ground Dirt Storage - Plant 5
	I-Ground Store	Ground Material Storage (Plant 3 and 4)
	I-Stockpile	Raw Materials Stockpiles (four acres)
	I5-C-1	Covered conveyor (24 inches wide)
Misc. tanks	I-D-TANK1	Diesel fuel storage tank (10,000 gallons maximum capacity)
	I-D-TANK2	Diesel fuel storage tank (10,000 gallons maximum capacity)
	I-D-TANK3	Diesel fuel storage tank (500 gallons maximum capacity)
	I-G-TANK1	Gasoline fuel storage tank (3,000 gallons maximum capacity)

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the Permittee is exempted from demonstrating compliance with any applicable requirement.

2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" or 02Q .0711 "Emission Rates Requiring a Permit".

3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled “Specific Permit Conditions Regulatory Guide.” The link to this site is as follows: http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide

Summary of Changes to Permit

The following changes were made to the Pine Hall Brick Co., Inc., Air Permit No. 03997T27:

Page No.	Section	Changes
Throughout	Throughout	• Updated dates/permit numbers.
3	Equipment List	• Corrected Primary Jaw Crusher capacity
21	2.2 B.4	• Add DLA/bagfilter bypass requirement language
24-31	3.	• Updated General Conditions to v5.2.

State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Effective Date	Expiration Date
03997T28	03997T27	XXXXX XX, 2018	September 30, 2022

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: **Pine Hall Brick Co., Inc.**
Facility ID: **7900038**

Facility Site Location: **634 Lindsey Bridge Road**
City, County, State, Zip: **Madison, Rockingham County, NC 27025**

Mailing Address: **Post Office Box 836**
City, State, Zip: **Madison, NC 27025**

Application Number: **7900038.18A**
Complete Application Date: **March 27, 2018**

Primary SIC Code: **3251**
Division of Air Quality, Regional Office Address: **Winston-Salem Regional Office**
450 West Hanes Mill Road, Suite 300
Winston-Salem, NC 27105

Permit issued this the XXth day of XXXXX, 2018.

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William D. Willets, P.E., Chief, Air Permits Section
By Authority of the Environmental Management Commission

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SECTION 1 - PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S)

The following table contains a summary of all permitted emission sources and associated air pollution control devices:

Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Plant 3				
5-6, 27-29	3VS3.4A and 3VS3.4B **NSPS, OOO**	Two Leahy vibrating screens (4 feet by 8 feet each, 20 tons per hour capacity each)	N/A	N/A
5-6, 27-29	3VS3.4C and 3VS3.4D **NSPS, OOO**	Two Simplicity vibrating screens (4 feet by 10 feet each, 25 tons per hour capacity each)	N/A	N/A
5-6, 27-29	3C-32 **NSPS, OOO**	One conveyor belt from the primary crusher into the grinding building (36 inches in width)	N/A	N/A
5-6, 27-29	3JC-1 **NSPS, OOO**	Primary Jaw Crusher (32 inch by 42 inch, 250 tons per hour nominal, 342 tons per hour capacity)	N/A	N/A
7-9, 25-32	3ES-LK3.1 and 3ES-LK3.2 **Case By Case MACT**	*One combination brick kiln and wood fuel drying system consisting of:* Two natural gas/wood[1]-fired brick kilns (19.8 million Btu per hour heat input each, 10 tons per hour fired brick capacity each) with:	3CY3.1 and 3CY3.2	Two simple cyclones (58 inches in diameter each)
	ES-DRY2	One brick kiln exhaust gas heated fluidized bed wood (sawdust) drying system (10,000 pounds per hour capacity)		
10-12, 27-29	3ES-BRICKROOM	Plant 3 Brick making room air exhaust sent to cyclones followed by bagfilter venting indoors	3CY-T1 and 3CY-T2	Two simple cyclones (59 inches in diameter each)

Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Plant 4				
13-15, 25-32	4ES-LKD4.1 and 4ES-LKD4.2 **Case By Case MACT**	Two natural gas/propane/wood[1]-fired combination brick kilns (28.8 million Btu per hour heat input, 13.5 tons per hour fired brick capacity each) sharing a single stack	4ES-DLA[2]	One dry limestone adsorber, consisting of: four cascades, each 157.5 inches long by 157.5 inches wide by 72 inches high (maximum inlet air flow rate of 48,400 standard cubic feet per minute)
			4ES-BF	One bagfilter (7,085 square feet of filter area and nominal air-to-cloth ratio of 8.75:1)
16-18, 27-29	4ES-BRICKROOM-P	Plant 4 brick packing room air exhaust	4CY-2T.1 and 4CY-2T.2	Two simple cyclones (52 inches in diameter, each) exhausting indoors
16-18, 27-29	4ES-BRICKROOM-M	Plant 4 brick making room air exhaust	4CY-2T.3, and 4CY-2T.4	Two simple cyclones (64 inches in diameter, each)
			P4-BF	One bagfilter (2,443 square feet of filter area)
19-21 27-29	4-WHS-LKD4.1	718 cubic feet wood dust silo for Plant 4, Kiln 1	4-WHS-BVF-1	Bin vent filter (328 square feet of filter area)
19-21 27-29	4-WHS-LKD4.2	718 cubic feet wood dust silo for Plant 4, Kiln 2	4-WHS-BVF-2	Bin vent filter (328 square feet of filter area)
Plant 5				
22-32	5ES-LKD5.1 and 5ES-LKD5.2 **Case By Case MACT**	Two natural gas-fired combination brick dryer and kiln systems (28.88 million Btu per hour heat input each, 11.95 tons per hour fired brick capacity each)	N/A	N/A

1 Includes off-site green wood and processed wood.
2 Not required for compliance.

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1 Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) listed below are subject to the following specific terms, conditions, and limitations, including the monitoring, recordkeeping, and reporting requirements as specified herein:

A. Grinding Building NSPS affected facilities including:

- **two Leahy vibrating screens (ID Nos. 3VS3.4A and 3VS3.4B),**
- **two Simplicity vibrating screens (ID Nos. 3VS3.4C and 3VS3.4D),**
- **one conveyor belt from the primary crusher (ID No. 3C-32), and**
- **one primary jaw crusher (ID No. 3JC-1)**

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter and visible emissions	See Section 2.1 A.1.	15A NCAC 02D .0524 (40 CFR Part 60, Subpart OOO)
Toxic air pollutants	See Section 2.2 B.1. - State enforceable only	15A NCAC 02D .1100
	See Section 2.2 B.2. - State enforceable only	15A NCAC 02Q .0711
Odors	See Section 2.2 B.3. - Odorous emissions must be controlled; State enforceable only	15A NCAC 02D .1806

1. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR PART 60, SUBPART OOO)

a. For these emission sources (ID Nos. 3VS3.4A, 3VS3.4B, 3VS3.4C, 3VS3.4D, 3C-32, and 3JC-1), the Permittee shall comply with all applicable provisions, notification, testing, reporting, record keeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60, Subpart OOO "Standards of Performance for Nonmetallic Mineral Processing Plants" and Subpart A "General Provisions".

Emission Standards [15A NCAC 02D .0524, 40 CFR 60.672(b)]

b. For each affected source not enclosed within a building:
   i. For each non-crusher affected source, visible emissions shall be less than 10 percent opacity.
   ii. For each crusher affected source, visible emissions shall be less than 12 percent opacity.

c. For each affected source enclosed within a building:
   i. visible emissions from the building shall be less than 7 percent opacity, and
   ii. particulate matter emissions shall be less than 5 grams per dry standard cubic meter.

Testing [15A NCAC 02Q .0508(f)]

d. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Sections 2.1 A.1.b. and c. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring [15A NCAC 02Q .0508(f)]

e. For each affected facility, the Permittee shall:
   i. observe building vents and emission points each month for any visible emissions which exceed normal, and
   ii. If visible emissions are observed that exceed normal, the Permittee shall perform a Method 9 opacity determination for each emission point. The Method 9 determination shall meet the requirements of 40 CFR 60.670.

If the Permittee does not perform monthly observations and/or if the result of a Method 9 determination is greater than the emission standards in Sections 2.1 A.1.b. or c., the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524, if records of the monitoring results are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit, in writing a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

B. Plant 3 combination brick kiln and wood fuel drying system including:

- **two natural gas/wood-fired brick tunnel kilns (ID Nos. 3ES-LK3.1 and 3ES-LK3.2), and**
- **one brick kiln exhaust gas-heated fluidized bed wood (sawdust) drying system (ID No. ES-DRY2)**

each controlled by two parallel simple cyclones (ID Nos. 3CY3.1 and 3CY3.2)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter including PM_{10}	See Section 2.1 B.1.	15A NCAC 02D .0515
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Carbon monoxide	Less than 250 tons per consecutive 12-month period, See Section 2.2 A.1.	15A NCAC 02Q .0317 (Avoidance of PSD)
Toxic air pollutants	See Section 2.2 B.1. - State enforceable only See Section 2.2 B.2. - State enforceable only	15A NCAC 02D .1100 15A NCAC 02Q .0711
Odors	See Section 2.2 B.3. - Odorous emissions must be controlled; State enforceable only	15A NCAC 02D .1806
HAPs	See Section 2.2 B.4.	15A NCAC 02D .1109

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from these sources **(ID Nos. 3ES-LK3.1, 3ES-LK3.2 and ES-DRY2)** shall not exceed an allowable emission rate calculated by the following equation:

For $P \leq 30$, $E = 4.10 \times (P)^{0.67}$
For $P > 30$, $E = 55.0 \times (P)^{0.11} - 40$

Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring [15A NCAC 02Q .0508(f)]

c. Particulate matter emissions from the combination brick kiln and wood fuel drying system shall be controlled by one simple cyclone or two parallel simple cyclones. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the control device manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual inspection of the system ductwork and material collection units for leaks;
   ii. an annual external inspection of the cyclones' structural integrity; and
   iii. every six months, a visual inspection of the fuel combustion systems.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if inspections of the system ductwork or fuel combustion systems are not performed.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions;
   iii. the results of any maintenance performed on the cyclones; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515, if records of the monitoring results are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit the results of any maintenance performed on the cyclones within 30 days of a written request by the DAQ.

f. The Permittee shall submit, in writing a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from the combination brick kiln **(ID Nos. 3ES-LK3.1 and 3ES-LK3.2)** and wood fuel drying system **(ID Nos. ES-DRY2)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting of sulfur dioxide emissions from these sources **(ID Nos. 3ES-LK3.1, 3ES-LK3.2, and ES-DRY2**) is required to show compliance with 15A NCAC 02D .0516.

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the combination brick kiln **(ID Nos. 3ES-LK3.1 and 3ES-LK3.2)** and wood fuel drying system **(ID Nos. ES-DRY2)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.3.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To ensure compliance, once each month the Permittee shall observe the emission points of this source for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:

i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 B.3.a. above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521, if records of the monitoring results are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit, in writing a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

C. Plant 3 equipment including: Brick making room (ID No. 3ES-BRICKROOM) controlled by simple cyclones (ID Nos. 3CY-T1 and 3CY-T2)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	See Section 2.1 C.1	15A NCAC 02D .0515
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Toxic air pollutants	See Section 2.2 B.1. - State enforceable only	15A NCAC 02D .1100
	See Section 2.2 B.2. - State enforceable only	15A NCAC 02Q .0711
Odors	See Section 2.2 B.3. - Odorous emissions must be controlled; State enforceable only	15A NCAC 02D .1806

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from the brick making room air exhaust **(ID No. 3ES-BRICKROOM)** shall not exceed an allowable emission rate as calculated by the following equation:

$$\text{For } P \leq 30,\ E = 4.10 \times (P)^{0.67}$$
$$\text{For } P > 30,\ E = 55.0 \times (P)^{0.11} - 40$$

Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508 (f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring [15A NCAC 02Q .0508(f)]

c. Particulate matter emissions from the brick making room air exhaust shall be controlled by one set of twin parallel simple cyclones **(ID Nos. 3CY-T1 and 3CY-T2)**. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the control device manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual inspection of the system ductwork and material collection units for leaks; and
   ii. an annual external inspection of the cyclones' structural integrity.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515, if the equipment is not inspected and maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on the cyclones; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in non-compliance with 15A NCAC 02D .0515, if records of the monitoring results are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit, in writing a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the brick making room air exhaust shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. No visual observations are required when this emission source **(ID Nos. 3ES-BRICKROOM)** is exhausting indoors.

d. To ensure compliance when emissions are exhausted outdoors, the Permittee shall observe the emission point once a month for any emissions above normal. The monthly observation must be made for each month of the calendar year period (when emissions were exhausted outdoors) to ensure compliance with this requirement. If visible emissions are observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 C.2.a. above.

   If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

e. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521, if records of the monitoring results are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

f. The Permittee shall submit, in writing a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

D. Plant 4 equipment including: two natural gas/propane/wood-fired brick kilns (ID Nos. 4ES-LKD4.1 and 4ES-LKD4.2) sharing a single stack exhausting to one dry limestone adsorber (ID No. 4ES-DLA) in series with one bagfilter (ID No. 4ES-BF)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	See Section 2.1 D.1	15A NCAC 02D .0515
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Carbon monoxide	less than 250 tons per consecutive 12-month period, See Section 2.2 A.1.	15A NCAC 02Q .0317 (Avoidance of PSD)
Toxic air pollutants	See Section 2.2 B.1. - State enforceable only	15A NCAC 02D .1100
	See Section 2.2 B.2. - State enforceable only	15A NCAC 02Q .0711
Odors	See Section 2.2 B.3. - odorous emissions must be controlled; State enforceable only	15A NCAC 02D .1806
Filterable PM and HCl-equivalent	See Section 2.2 B.4	15A NCAC 02D .1109

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from these sources **(ID Nos. 4ES-LKD4.1 and 4ES-LKD4.2)** shall not exceed an allowable emission rate as calculated by the following equation:

$$\text{For } P \leq 30,\ E = 4.10 \times (P)^{0.67}$$
$$\text{For } P > 30,\ E = 55.0 \times (P)^{0.11} - 40$$

Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508 (f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.1.a. above, the Permittee shall be deemed in noncompliance.

Monitoring [15A NCAC 02Q .0508(f)]

c. To ensure compliance, the Permittee shall perform an inspection of the brick kilns in accordance with the following:
   i. a monthly visual inspection of the system ductwork for leaks; and
   ii. every six months, perform a visual inspection of the fuel combustion system.

The Permittee shall be deemed in noncompliance with Section 2.1 D.1.a above if the ductwork and combustion systems are not inspected and maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with Section 2.1 D.1.a. if records of the monitoring results are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit, in writing a summary report of monitoring and record keeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from these sources **(ID Nos. 4ES-LKD4.1 and 4ES-LKD4.2)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting of sulfur dioxide emissions from these sources **(ID Nos. 4ES-LKD4.1 and 4ES-LKD4.2)** is required to show compliance with 15A NCAC 02D .0516.

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources **(ID Nos. 4ES-LKD4.1 and 4ES-LKD4.2)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.3.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To ensure compliance, once a month the Permittee shall observe the emission points of this source for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 D.3.a. above.

   If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed in non-compliance with 15A NCAC 02D .0521 if records of the monitoring results are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit, in writing a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

E. Plant 4 equipment including:

- **Plant 4 brick packing room air exhaust (ID No. 4ES-BRICKROOM-P) exhausting to two simple cyclones (ID Nos. 4CY-2T.1 and 4CY-2T.2) operating in parallel, and**
- **Plant 4 brick making room air exhaust (ID No. 4ES-BRICKROOM-M) exhausting to two simple cyclones (ID Nos. 4CY-2T.3 and 4CY-2T.4) operating in parallel, each exhausting to one bagfilter (ID No. PF-BF)**

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	See Section 2.1 E.1.	15A NCAC 02D .0515
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Toxic air pollutants	See Section 2.2 B.1. - State enforceable only	15A NCAC 02D .1100
	See Section 2.2 B.2. - State enforceable only	15A NCAC 02Q .0711
Odors	See Section 2.2 B.3. - odorous emissions must be controlled; State enforceable only	15A NCAC 02D .1806

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from these sources **(ID Nos. 4ES-BRICKROOM-P and 4ES-BRICKROOM-M)** shall not exceed an allowable emission rate as calculated by the following equation:

For $P \leq 30$, $E = 4.10 \times (P)^{0.67}$

For $P > 30$, $E = 55.0 \times (P)^{0.11} - 40$

Where E = allowable emission rate in pounds per hour

P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring [15A NCAC 02Q .0508(f)]

c. Particulate matter emissions from the sources shall be controlled cyclones **(ID Nos. 4CY-2T.1, 4CY-2T.2, 4CY-2T.3, and 4CY-2T.4)** and bagfilter **(ID No. PF-BF)**, above. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the control device manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:

i. a monthly visual inspection of the system ductwork and material collection units for leaks;
ii. an annual external inspection of the cyclones' structural integrity; and
iii. an annual (for each 12-month period following the initial inspection) internal inspection of the bagfilter's structural integrity

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if inspections of the filter, system ductwork, and material collection units are not performed.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:

i. the date and time of each recorded action;

ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions;
iii. the results of any maintenance performed on the cyclones; and
iv. any variance from manufacturer's recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if records of the monitoring results are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit, in writing a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources **(ID Nos. 4ES-BRICKROOM-M and 4ES-BRICKROOM-P)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in condition a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To ensure compliance, once a week the Permittee shall observe the emission point of this source (**ID No. 4ES-BRICKROOM-M and 4ES-BRICKROOM-P)** for any visible emissions above normal. The weekly observation must be made for each week of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 E.3. a. above.

   If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained**.**

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

F. Plant 4 equipment including:

- **wood dust silo (ID No. WHS-LKD4.1) associated with Plant 4 Kiln 1, controlled by bin vent filter (ID No. 4-WHS-BVF-1), and**
- **wood dust silo (ID No. WHS-LKD4.2) associated with Plant 4 Kiln 2, controlled by bin vent filter (ID No. 4-WHS-BVF-2)**

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	See Section 2.1 F.1.	15A NCAC 02D .0515
Visible emissions	20 percent opacity	15A NCAC 02D .0521

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from these sources **(ID Nos. WHS-LKD4.1 and WHS-LKD4.2)** shall not exceed an allowable emission rate as calculated by the following equation:

For $P \leq 30$, $E = 4.10 \times (P)^{0.67}$

For $P > 30$, $E = 55.0 \times (P)^{0.11} - 40$

Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 F.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring [15A NCAC 02Q .0508(f)]

c. Particulate matter emissions from the wood dust silos for Plant 4 Kilns 1 and 2 shall be controlled by bagfilters **(ID Nos. 4-WHS-BVF-1 and 4-WHS-BVF-2)**, as described above. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
   ii. an annual (for each 12 month period following the initial inspection) internal inspection of the bagfilter's structural integrity.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and bagfilters are not inspected and maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on the bagfilters; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit the results of any maintenance performed on the bagfilters within 30 days of a written request by the DAQ.

f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the sources **(ID Nos. WHS-LKD4.1 and WHS-LKD4.2)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 F.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To ensure compliance, once a week the Permittee shall observe the emission points of these sources **(ID Nos. WHS-LKD4.1 and WHS-LKD4.2)** for any visible emissions above normal. The weekly observation must be made for each week of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 F.2. a. above.

   If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if records of the monitoring results are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit, in writing a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

G. Plant 5 equipment including: two natural gas-fired combination brick dryer and kiln systems (ID Nos. 5ES-LKD5.1 and 5ES-LKD5.2)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	See Section 2.1 G.1.	15A NCAC 02D .0515
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Toxic air pollutants	See Section 2.2 B.1. - State enforceable only	15A NCAC 02D .1100
	See Section 2.2 B.2. - State enforceable only	15A NCAC 02Q .0711
Odors	See Section 2.2 B.3. - odorous emissions must be controlled; State enforceable only	15A NCAC 02D .1806
Filterable PM	See Section 2.2 B.4	15A NCAC 02D .1109
HCl-equivalent	See Section 2.2 B.4	15A NCAC 02D .1109

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from these sources **(ID Nos. 5ES-LKD5.1 and 5ES-LKD5.2)** shall not exceed an allowable emission rate as calculated by the following equation:

For $P \leq 30$, $E = 4.10 \times (P)^{0.67}$
For $P > 30$, $E = 55.0 \times (P)^{0.11} - 40$

Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 G.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring [15A NCAC 02Q .0508(f)]

c. To ensure compliance with the emissions limitations, the Permittee shall perform the following monitoring exercises:
   i. a monthly visual inspection of the system ductwork for leaks; and
   ii. every six months, perform a visual inspection of the brick kiln fuel combustion system.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork is not inspected and maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if records of the monitoring results are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit, in writing a summary report of monitoring and record keeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from these sources **(ID Nos. 5ES-LKD5.1 and 5ES-LKD5.2)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 G.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting of sulfur dioxide emissions from these sources **(ID Nos. 5ES-LKD5.1 and 5ES-LKD5.2)** is required to show compliance with this regulation.

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources **(ID Nos. 5ES-LKD5.1 and 5ES-LKD5.2)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with and General Condition JJ. If the results of this test are above the limit given in Section 2.1 G.3.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources **(ID Nos. 5ES-LKD5.1 and 5ES-LKD5.2)** for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission points of the emission sources in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 G.3.a. above.

   If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if records of the monitoring results are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit, in writing a summary report of the observations postmarked of or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2.2 MULTIPLE EMISSION SOURCE(s): Specific Limitations and Conditions (Including specific requirements, monitoring/testing, record keeping, and reporting requirements)

A. Plant 3 and Plant 4 Equipment

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Carbon monoxide	Less than 250 tons per consecutive 12-month period	15A NCAC 02Q .0317 (Avoidance of 15A NCAC 02D .0530)

1. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 02D .0530 (g) for major sources and major modifications, **Plant 3 and Plant 4** equipment shall discharge into the atmosphere less than 250 tons of carbon monoxide (CO) total, per consecutive 12-month period.

b. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources and major modification, **Plant 4** production rate shall be limited to 232,000 tons per year of fired brick.

Testing [15A NCAC 02Q .0508(f)]

c. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 A. 1. a., the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508 (f)]

d. The Permittee shall keep monthly records of the amount of bricks produced while firing natural gas and while firing wood (sawdust) in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the amount of bricks produced is not monitored.

e. The monthly brick production shall be limited such that carbon monoxide emissions shall not exceed 250 tons for any consecutive 12-month period. Calculations shall be made monthly and recorded in a logbook (written or electronic format), according to the following formula:

$$\mathrm{E} = \frac{(EF_{\mathrm{B1}} \times Q_{\mathrm{B1}}) + (EF_{\mathrm{B2}} \times Q_{\mathrm{B2}})}{2{,}000}$$

Where:

E = Annual CO emissions, in tons per year;

EF_{B1} = Emission factor for brickmaking while firing natural gas, established as **0.85** pounds of CO per ton of brick produced;

Q_{B1} = Bricks produced while firing natural gas, in tons per year;

EF_{B2} = Emission factor for brickmaking while firing wood (sawdust), established as **1.6** pounds of CO per ton of brick produced; and

Q_{B1} = Bricks produced while firing wood (sawdust), in tons per year

f. The Permittee shall keep monthly records on site for a minimum of three years and make them available to DAQ personnel upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the above records are not kept or if the carbon monoxide emissions exceed the limit in Section 2.2 A.1.a. above.

Reporting [15A NCAC 02Q .0508(f)]

g. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:

i. The monthly brick production while firing natural gas in units of tons for the previous 17 months. The total brick production must be calculated for each of the 12-month periods over the previous 17 months;

ii. The monthly brick production while firing wood (sawdust) in units of tons for the previous 17 months. The total brick production must be calculated for each of the 12-month periods over the previous 17 months;

iii. The total monthly carbon monoxide emissions in units of tons for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months; and
iv. All instances of deviations from the requirements of this permit must be clearly identified.

B. Facility wide Sources

State-enforceable only

1. 15A NCAC 02D .1100: TOXIC AIR POLLUTANT EMISSIONS LIMITATION AND REPORTING REQUIREMENT

a. In accordance with the approved application for an air toxic compliance demonstration (supplied with application 7900038.06B, approved with permit 03997T20), the following permit limits for the combined total emission of toxic air pollutants from each source shall not exceed the following:

Toxic Air Pollutants	Emission Limits per Source			
	3ES-LK3.1 and 3ES-LK3.2	4ES-LKD4.1 and 4ES-LKD4.2	5ES-LKD5.1	5ES-LKD5.2
Ammonia	0.0 lb/hr	8.92 lb/hr	0.0 lb/hr	0.0 lb/hr
Arsenic	5.439 lb/yr	7.367 lb/yr	3.249 lb/yr	3.249 lb/yr
Beryllium	0.073 lb/yr	0.098 lb/yr	0.087 lb/yr	0.087 lb/yr
Benzene	508.08 lb/yr	683.28 lb/yr	297.84 lb/yr	297.84 lb/yr
Cadmium	3.854 lb/yr	5.203 lb/yr	1.568 lb/yr	1.568 lb/yr
Chlorine	0.624 lb/day	0.84 lb/day	0.36 lb/day	0.36 lb/day
Chromium	0.024 lb/day	0.033 lb/day	0.014 lb/day	0.014 lb/day
di (2-thylhexyl)phthalate	0.96 lb/day	1.296 lb/day	0.573 lb/day	0.573 lb/day
Formaldehyde	3.303 lb/hr	4.464 lb/hr	0.001 lb/hr	0.001 lb/hr
Hydrogen Chloride	3.403 lb/hr	7.026 lb/hr	2.063 lb/hr	2.063 lb/hr
Hydrogen Fluoride	11.81 lb/hr	15.95 lb/hr	7.063 lb/hr	7.063 lb/hr
	283.44 lb/day	36.984 lb/day	169.512 lb/day	169.512 lb/day
Mercury	0.005 lb/day	0.007 lb/day	0.002 lb/day	0.002 lb/day
Manganese	0.230 lb/day	0.309 lb/day	0.081 lb/day	0.081 lb/day
Nickel	0.033 lb/day	0.046 lb/day	0.02 lb/day	0.02 lb/day

b. To ensure compliance with the above limits, the following restrictions shall apply:
   i. **ID Nos. 3ES-LK3.1, 3ES-LK3.2 and ES-DRY2:**
      A. The combined brick production rate of **3ES-LK3.1, 3ES-LK3.2 and ES-DRY2** shall not exceed 20 tons per hour.
      B. The stack height of **3ES-LK3.1, 3ES-LK3.2 and ES-DRY2** shall be at least 21.6 meters.
   ii. **ID Nos. 4ES-LKD4.1 and 4ES-LKD4.2**:
      A. The combined brick production rate of **ID Nos. 4ES-LKD4.1 and 4ES-LKD4.2** shall not exceed 27 tons per hour.
      B. The stack height of **ID Nos. 4ES-LKD4.1 and 4ES-LKD4.2** shall be at least 33.53 meters.
   iii. **ID Nos. 5ES-LKD5.1 and 5ES-LKD5.2:**
      A. If the Permittee has raised the stack height of **ID Nos. 5ES-LKD5.1 and 5ES-LKD5.2** to at least 16.76 meters, then the brick production rate shall not exceed 11.95 tons per hour, each.
      B. Otherwise, the brick production rate for **ID Nos. 5ES-LKD5.1 and 5ES-LKD5.2** shall not exceed 10.25 tons per hour, each.

Testing [15A NCAC 02D .0611]

c. The DAQ may require the Permittee to perform periodic sampling and analysis of clay and weathered clay used at the facility for determination of fluoride concentration.
d. The Permittee shall notify the Air Quality Regional Supervisor, DAQ within 30 days of initial start-up of the use of any clay or weathered clay received from a new source (supplier), and provide the analytical results of fluoride concentration within 30 days of such date.

Monitoring/Recordkeeping/Reporting [15A NCAC 02D .0611]

e. The Permittee shall demonstrate compliance with the operating limits in Paragraph 2.2 B.1.b. by complying with the recordkeeping and reporting requirements in Paragraphs 2.2 B.4.f. and l.

State-enforceable only

2. 15A NCAC 02Q .0711: EMISSION RATES REQUIRING A PERMIT

a. As of the issuance date of air permit 03997T18, April 12, 2006, emissions of toxic air pollutants have been demonstrated on a facility-wide basis (excluding those sources exempt under 15A NCAC 02Q .0702 "Exemptions") that each of the toxic air pollutants (TAPs) emitted from all sources at the facility are either below its respective toxic permit emission rates (TPER) listed in 15A NCAC 02Q .0711 "Emission Rates Requiring a Permit" or the TAPs are in compliance with 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" as described elsewhere in this permit.
b. The facility shall be operated and maintained in such a manner that any new, existing or increased actual emissions of any TAP listed in 15A NCAC 02Q .0711 or in this permit from all sources at the facility (excluding those sources exempt under 15A NCAC 02Q .0702 "Exemptions"), including fugitive emissions and emission sources not otherwise required to have a permit, will not exceed its respective TPER listed in 15A NCAC 02Q .0711 without first obtaining an air permit to construct or operate.
c. PRIOR to exceeding any of the TPERs listed in 15A NCAC 02Q .0711(a), the Permittee shall be responsible for obtaining an air permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 02D .1100 "Control of Toxic Air Pollutants".
d. The Permittee shall maintain at the facility records of operational information sufficient for demonstrating to the Division of Air Quality staff that actual TAPs are less than the rate listed in 15A NCAC 02Q .0711.
e. The TPER table listed below is provided to assist the Permittee in determining when an air permit is required pursuant to 15A NCAC 02Q .0711 and may not represent all TAPs being emitted from the facility. This table will be updated at such time as the permit is either modified or renewed.

TPER Limitation				
Pollutant (CAS Number)	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
benzo(a)pyrene (50-32-8)	2.2			
carbon disulfide (75-15-0)		3.9		
p-dichlorobenzene (106-46-7)				16.8
n-hexane (110-54-3)		23		
methyl ethyl ketone (78-93-3)		78		22.4
methyl chloroform (71-55-6)		250		64
Perchloroethylene (127-18-4)	13,000			
Phenol (108-95-2)			0.24	
Styrene (100-42-5)			2.7	
Toluene (108-88-3)		98		14.4
Xylene (1330-20-7)	57			16.4

State-enforceable Only

3. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS:

a. The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

4. 15A NCAC 02D .1109: 112(j) CASE-BY-CASE MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (Case-by-Case MACT for Brick Manufacturers)

Regulated Pollutant	Limits/Standards	Applicable Regulation
Filterable PM	**Affected Source: ID Nos. 4ES-LKD4.1, 4ES-LKD4.2, 5ES-LKD5.1, and 5ES-LKD5.2** 0.17 lbs/ton **Affected Source: ID Nos. 3ES-LK3.1 and 3ES-LK3.2** Limit the operation of kilns 3ES-LK3.1 and 3ES-LK3.2 to no more than 9 tons/hour of fired product total and operate no more than six (6) months on a 12-month rolling average basis. Implement best work practices.	15A NCAC 02D .1109
HCl-equivalent	63.04 lbs/hr from all six kilns, combined	15A NCAC 02D .1109

a. i. The Permittee shall limit the operation of each affected tunnel kiln **(ID Nos. ES3-LK3.1 and ES3-LK3.2)** to no more than 9 tons per hour of fired product total across both kilns on a 12-month rolling average basis.
ii. The Permittee shall operate each affected tunnel kiln **(ID Nos. ES3-LK3.1 and ES3-LK3.2)** no more than six months per rolling 12-month period.

b. Upon promulgation of an emission standard that is applicable to the kilns after the date the permit is issued, DAQ will establish a compliance date for the standard upon the next renewal of the permit. The owner or operator shall comply with the promulgated standard within a reasonable time, but no longer than eight years after such standard is promulgated or eight years after the date by which the owner or operator was first required to comply with the emission limitation established by permit, whichever is earlier.

Emissions Standards [15A NCAC 02D .1109]

c. Emissions of the following regulated pollutants shall not exceed the emissions limits listed below:
i. Filterable PM:
A. 0.17 pounds per ton (lb/ton) for the large tunnel kilns (**ID Nos. 4ES-LKD4.1, 4ES-LKD4.2, 5ES-LKD5.1, and 5ES-LKD5.2**).
B. The tunnel kilns (**ID Nos. 3ES-LK3.1 and 3ES-LK3.2**) shall comply with work practice standards.
ii. HCl-equivalent:
A. 63.04 pounds per hour (lb/hr) from all tunnel kilns **(ID Nos. 3ES-LK3.1, 3ES-LK3.2, 4ES-LKD4.1, 4ES-LKD4.2, 5ES-LKD5.1, and 5ES-LKD5.2)**.
B. HCl-equivalent is defined by the following equation:

$$E = E_{HCl} + E_{HF} \times (RfC_{HCl}/RfC_{HF})$$

Where:
E = HCl-equivalent emission rate (in lb/hr)
E_{HCl} = HCl emission rate (in lb/hr);
E_{HF} = HF emission rate (in lb/hr);
RfC_{HCl} = Reference concentration for HCl (20 micrograms per cubic meter [$\mu g/m^3$]); and
RfC_{Cl2} = Reference concentration for HF (14 $\mu g/m^3$).

The Permittee shall follow the procedures in 15A NCAC 02D. 0535 for any excess emissions that occur during periods of startup, shutdown, or malfunction.

Testing [15A NCAC 02Q .0508(f)]

d. i. The Permittee demonstrated initial compliance with the HCl-equivalent emission standard on May 19-20, 2016 (test reference number 2016-125ST).
ii. The Permittee demonstrated initial compliance with the filterable PM emission standard on May 19-20, 2016 (test reference number 2016-125ST) for Plant 5 Kilns and February 22, 2017 for Plant 4 Kilns (test reference number 2017-046ST).

iii. If additional emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.2 B.4.c., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109.

Work Practice Standards [15A NCAC 02Q .0508(f)]

e. The Permittee shall perform annual inspection and maintenance of the tunnel kilns (**ID Nos. 3ES-LK3.1 and 3ES-LK3.2**) as recommended by the manufacturer, or as a minimum, the inspection and maintenance requirement shall include the following:
   i. Conduct a visual inspection of the ductwork system for each tunnel kiln for leaks, holes, or disrepair; and,
   ii. Inspect each burner, and clean or replace any components of the burner as necessary;
   iii. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly.

   The Permittee shall conduct at least one inspection per calendar year to demonstrate compliance with this requirement. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if the affected tunnel kilns not inspected and maintained as required above.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

f. The Permittee shall maintain monthly records of the production rates on a fired-product basis for each affected tunnel kiln **(ID Nos. 3ES-LK3.1, 3ES-LK3.2, 4ES-LKD4.1, 4ES-LKD4.2, 5ES-LKD5.1, and 5ES-LKD5.2)**. The records shall include, at a minimum, the following:
   i. The total quantity (in tons) of fired product produced at each affected tunnel kiln during the previous calendar month; and,
   ii. The total quantity (in tons) of fired product produced at each affected tunnel kiln during the previous 12-month period; and,
   iii. The average production rate of each affected tunnel kiln (in tons/hour) for the previous 12-month period, calculated by dividing the total 12-month production rate recorded in Paragraph 2.2 B.4.f.ii. above by 8,760 hours per year.

g. i. The Permittee shall perform a monthly visible inspection of the bagfilter **(ID No. 4ES-BF)** and associated ductwork for leaks.
   ii. Pressure drop across the bagfilter **(ID No. 4ES-BF)** shall be continuously monitored and recorded as a 3-hour block average. An acceptable pressure drop range shall be based on the manufacturer recommendations and shall be established as part of the initial compliance testing required in Section 2.2 B. 4.d. above.
   iii. The Permittee shall maintain records of bagfilter inspections and pressure drop readings in a logbook (written or electronic format). The logbook shall be maintained on-site and made available to authorized representatives upon request.

h. The results of inspection and maintenance at the tunnel kilns in Plant 3 **(ID Nos. 3ES-LK3.1, 3ES-LK3.2)** shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. The date of each recorded action;
   ii. The results of each inspection; and,
   iii. The results of any maintenance performed on the tunnel kilns.

i. The results of the visible emissions observations at the large tunnel kilns **(ID Nos. 4ES-LKD4.1, 4ES-LKD4.2, 5ES-LKD5.1, and 5ES-LKD5.2)** required by Sections 2.1 D.3 and G.3 shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. The date and time of each recorded action;
   ii. The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. The results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if the bagfilter and associated ductwork are not inspected and maintained, and if the 3-hour block pressure drop falls outside the established range, and/or if these records are not maintained.

j. The Permittee shall maintain a record of each period when the large tunnel kilns are operated while bypassing the DLA **(ID No. 4ES-DLA)** and/or the bagfilter (**ID No. 4ES-BF**) in order to perform routine maintenance. The records shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request, and shall include:
   i. The start date and start time of the routine maintenance;
   ii. The stop date and stop time of the routine maintenance;
   iii. A description of the maintenance activities; and,
   iv. The total time the kiln has operated in by-pass, and the total percentage of the operating time the kilns have been operated in bypass for the previous 12-month period.

   The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1109 if these records are not maintained

or if the percentage of time the kiln operates in bypass exceeds 4% of the annual operating time.

Reporting [15A NCAC 02Q .0508(f)]

k. The Permittee shall submit the results of any maintenance performed on the bagfilters within 30 days of a written request by the DAQ.

l. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. In addition, the report shall contain the following:
   i. Company name, facility ID number, and address;
   ii. Statement by the Responsible Official with that official's name, title, and signature certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete;
   iii. A description of routine maintenance performed while the DLA **(ID No. 4ES-DLA)** and/or the bagfilter (**ID No. 4ES-BF**) were offline and the large tunnel kilns **(ID Nos. 4ES-LKD4.1 and 4ES-LKD4.2)** were operating, including the following:
      A. The date and time when the DLA and/or bagfilter were shutdown and restarted.
      B. Identification of the number of hours that the kilns operated while the DLA and/or bagfilter were offline.
      C. The *total* amount of time (in hours and % of total operating time) that the associated kiln operated during the current semiannual compliance period and during the previous semiannual compliance period.
   iv. For each deviation from a limitation (emission limit, operating limit, or work practice standard), include the following information:
      A. The total operating time of each affected source during the reporting period.
      B. Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

   If there were no deviations from any of the applicable limitations, a statement that there were no deviations during the reporting period.

SECTION 3 - GENERAL CONDITIONS (version 5.2, 04/03/2018)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**

1. Administrative Permit Amendments [15A NCAC 02Q .0514]
   The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
   The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]
   The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]
   The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]
   The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**

1. Reporting Requirements
   Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
   a. changes in the information submitted in the application;
   b. changes that modify equipment or processes; or
   c. changes in the quantity or quality of materials processed.

   If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
   a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
   b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
      i. the changes are not a modification under Title I of the Federal Clean Air Act;
      ii. the changes do not cause the allowable emissions under the permit to be exceeded;
      iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
      iv. the Permittee shall attach the notice to the relevant permit.
   c. The written notification shall include:
      i. a description of the change;
      ii. the date on which the change will occur;
      iii. any change in emissions; and
      iv. any permit term or condition that is no longer applicable as a result of the change.
   d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. Off Permit Changes [15A NCAC 02Q .0523(b)]
   The Permittee may make changes in the operation or emissions without revising the permit if:
   a. the change affects only insignificant activities and the activities remain insignificant after the change; or
   b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]
   To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A **Reporting Requirements for Excess Emissions and Permit Deviations** [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

"Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. *(Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.)*

"Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
    a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
        i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
            - name and location of the facility;
            - nature and cause of the malfunction or breakdown;
            - time when the malfunction or breakdown is first observed;
            - expected duration; and
            - estimated rate of emissions;
        ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
        iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
    a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B **Other Requirements under 15A NCAC 02D .0535**

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. **Emergency Provisions** [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
    a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
    b. the permitted facility was at the time being properly operated;
    c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and

d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.

4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]
This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least six months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]
It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]
1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]
The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]
The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]
The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:
1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]
A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
   a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
   b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
   c. the applicable requirements under Title IV; or
   d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 02Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
   a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
   b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
   c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
   d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

   Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.
2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]
The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q. 0508(i)(9)]
Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]
A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]
The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History [**15A NCAC 02Q .0507(d)(4)]
The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(e)]
1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]
If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) –** FEDERALLY-ENFORCEABLE ONLY
Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]
This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]
Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]
The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]
In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 02Q .0508(i)(16)]
Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
    a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
        i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
        ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
        iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
    b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

KK. **Reopening for Cause** [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
    a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
    b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
    c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
    d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.

5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. **Reporting Requirements for Non-Operating Equipment** [15A NCAC 02Q .0508(i)(16)]
The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

MM. **Fugitive Dust Control Requirement** [15A NCAC 02D .0540]
As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas, stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. **Specific Permit Modifications** [15A NCAC 02Q .0501 and .0523]
1. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
    a. a description of the change at the facility;
    b. the date on which the change will occur;
    c. any change in emissions; and
    d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]
For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

ATTACHMENT to Permit 03997T27

List of Acronyms

AOS Alternate Operating Scenario
BACT Best Available Control Technology
Btu British thermal unit
CAA Clean Air Act
CEM Continuous Emission Monitor
CFR Code of Federal Regulations
DAQ Division of Air Quality
DEQ Department of Environmental Quality

EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_X	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM_{10}	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound